

REMARKS

Claims 1-82 are pending. Claims 1-82 are rejected.

Claim Amendments

Claims 1, 11, 13, 23, 34, 43, 50, 52, 63 and 73 are amended with merely clarifying amendments. Support for these clarifying amendments can be found throughout the specification.

Claims 12, 32-33, 51 and 71-72 are canceled without prejudice or disclaimer.

No new matter is added.

Rejection made under 35 U.S.C. § 103(a)

The Examiner has rejected claims 1-8, 23-28, 43-48 and 63-68 as being unpatentable under 35 U.S.C. 103(a) over Ravishankar et al. (U.S. Patent Pub. No. 2003/0060210), herein Ravishankar, and Puuskari et al. (U.S. Patent Pub. No. 2002/0032800), herein Puuskari. The Applicant includes the following comments to clearly distinguish the claimed invention over the art cited by the Examiner, and respectfully requests a favorable reconsideration of claims 1-8, 23-28, 43-48 and 63-68.

These rejections are respectfully disagreed with, and are traversed below.

It is well established law that in order for an obviousness rejection to be proper, the Patent Office must meet the burden of establishing a prima facie case for obviousness. Thus, as interpreted by the Courts, the Patent Office must meet the burden of establishing that all elements of the invention are disclosed in the prior art and that in accordance with *In re Lee*, the prior art must contain a suggestion, teaching, or motivation for one of ordinary skill in the art to modify a reference or combine references; and that the proposed modification must have had a reasonable expectation of success, determined from the vantage point of the skilled artisan at the time the invention was made.¹

¹ *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Agmen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996); *In re Sang Su Lee*, 277 F.3d 1338, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002).

Regarding independent claim 1, which recites:

“A method comprising:

at a certain protocol layer, receiving a first packet data message from an upper protocol layer, which first packet data message belongs to a first packet data protocol context characterised by certain first connection information associated with a first service access point indicator,

at said certain protocol layer, receiving a second packet data message from an upper protocol layer, which second packet data message belongs to a second packet data protocol context characterised by certain second connection information associated with a second service access point indicator,

reordering said first packet data message and said second packet data message **at said certain protocol layer** according to a relative urgency of transmission of said first and second packet data protocol contexts **and according to the first and second service access point indicators**, and

delivering said first packet data message and said second packet data message further from said certain protocol layer in reordered order,

wherein the method is performed by a mobile station to transfer user data in a wireless packet data network” (emphasis added).

The Examiner asserts that “Ravishankar does not disclose reordering the packet data”. The Applicant agrees with the Examiner on this point.

The Examiner asserts that Puuskari discloses “reordering packet data (paras. 48-49)”. Consider the cited portion of Puuskari:

“FIG. 3 illustrates the operation of a GPRS mobile station and GPRS network elements, as well as integration with external network QoS concepts. The MS or the software in the terminal equipment TE (e.g. in a laptop computer) provides **mapping of external network QoS requirements to GPRS QoS mechanisms**. The TE could, for example, provide QoS management functions through an Application Programming Interface (API). The application-level software may insert QoS information or a profile tag into the data packets, e.g. inside the IP header itself, or it can indicate the correct flow which the packet belongs to using some other suitable means. It can also use the RSVP to convey the necessary information via appropriate mapping layers to lower layers. The software of the MS may, alternatively, decide the QoS profile based e.g. on the used source and destination IP addresses, or on the source and destination port numbers, or on some other information configured to the MS.

“For Mobile Originated (MO) data, the MS schedules data packets based on the QoS information received from the application or from the GPRS protocol suite in the Terminal Equipment. The **MS schedules the MO packets** according to their delay class. On the SNDC layer, the **MS selects the appropriate LLC SAP** (Service Access Point) indicated by the SGSN during PDP context

activation or modification” (paragraph [0049], emphasis added).

Puuskari teaches that during PDP context activation certain QoS profile is mapped to the data packets “mapping of the QoS parameters used in the mobile-communication network to those used in a user application in the mobile packet data terminal” and the “MS, knowing the requirements of the applications, determines the corresponding QoS profile values, establishes a new PDP context for these packets” (paragraph [0032]). The “QoS Profile may include all the existing parameters (service precedence, reliability class, delay class, mean bit rate and peak bit rate)” (paragraph [0036]) and that “QoS scheduling in GPRS network elements (e.g. in an SGSN and a GGSN) is based on the **delay class**” (paragraph [0037]). The “MS schedules the MO packets according to their delay class” (paragraph [0049]). Clearly, Puuskari appears to teach that packet data messages are scheduled “according to their **delay class**”.

Further, Puuskari teaches “MS selects the appropriate LLC SAP (Service Access Point) indicated by the SGSN during PDP context activation or modification” (paragraph [0049]). Puuskari appears to teach that an “indication concerning real-time vs. non-real-time requirements on the Internet is mapped to a delay class” (paragraph [0030]).

Puuskari does not appear to teach “reordering... according to the first and second service access point indicators” as in claim 1. Rather, contrary to this, Puuskari teaches instead that scheduling is based on the “delay class” of the data packet.

Furthermore, the Examiner also asserts:

“the system is standardizes GPRS having standardized LLC and/or RLC data units associated with a standardized GMM unit (fig. 2a), where the standards include SAPI information and where the transmission modes include ACK and UNACK (gig. 3c, step 342)”.

Assuming arguendo that the Examiner is correct, this still does not disclose or suggest “**reordering**... according to the first and second service access point indicators” as in claim 1.

Puuskari appear to teach away from the solution disclosed in claim 1. Scheduling according to delay classes as taught in Puuskari would still result to disadvantages disclosed in the specification (see paragraphs 11 and 12) when transferring delay sensitive data over a GPRS

network.

As described in the specification, when the data packets are scheduled according to the teachings of Puuskari before delivering the scheduled packets, there is a possibility to reorder the data packets according to the LLC SAPI of the data packet, and then deliver the data packets in reordered order.

In accordance with the above arguments, there is no indication in Puuskari to reorder the data packets using LLC SAPI information before delivery. Therefore, it would not be obvious to the skilled person to combine teachings of Puuskari and Ravishankar.

Clearly, Puuskari does not disclose or suggest “**reordering** said first packet data message and said second packet data message at said certain protocol layer according to a **relative urgency of transmission** of said first and second packet data protocol contexts **and** according to the first and second **service access point indicators**” as in claim 1.

Neither Ravishankar nor Puuskari disclose or suggest reordering packet data messages at a certain protocol layer according to a relative urgency of transmission and service access point indicators, and delivering the packet data messages from the certain protocol layer in reordered order as in claim 1. Therefore, the combination of Ravishankar and Puuskari, herein Ravishankar-Puuskari, does not disclose or suggest claim 1. Thus claim 1 is in a condition for allowance.

As claims 23, 43, and 63 recite similar language to that discussed above with reference to claim 1, claims 23, 43, and 63 are likewise in condition for allowance.

As all of claims 2-8, 24-28, 44-48 and 64-68 depend upon claims 1, 23, 43, and 63, they are likewise in condition for allowance.

The Examiner has rejected the Applicant’s claims 9-22, 29-42, 49-62 and 69-82 as being

unpatentable under 35 U.S.C. 103(a) over Ravshankar in view of Puuskari and in further view of Yang et al. (U.S. Patent No. 6,996,061), herein Yang. The Applicant includes the following comments to clearly distinguish the claimed invention over the art cited by the Examiner, and respectfully requests a favorable reconsideration of claims 9-11, 13-22, 29-31, 34-42, 49-50, 52-62, 69-70 and 73-82.

These rejections are respectfully disagreed with, and are traversed below.

As seen above, Ravshankar-Puuskari does not disclose or suggest claims 1, 23, 43, and 63. As claims 1, 23, 43, and 63 are allowable over Ravshankar-Puuskari then all claims that depend from claims 1, 23, 43, and 63 should also be allowable over Ravshankar-Puuskari, whether considered alone or in combination with other art cited as applied by the Examiner. For at least this reason, claims 9-11, 13-22, 29-31, 34-42, 49-50, 52-62, 69-70 and 73-82 are in condition for allowance.

In light of the discussion above, the Applicant respectfully asserts that a prima facie case for obviousness was not presented as required by the court in *In re Lee*. As such, the Applicant respectfully requests that the Examiner reconsider and withdraw these rejections to claims 1-11, 13-31, 34-50, 52-70 and 73-82.

For the foregoing reasons, the Applicant believes that each and every issue raised by the Examiner has been adequately addressed and that this application is in a condition for allowance. As such, early and favorable action is respectfully solicited.

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